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10/009,306	04/16/2002	Francis Showcring	NOVAP100US	8228

7590 07/03/2007  
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EXAMINER
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SMALLEY, JAMES N

ART UNIT	PAPER NUMBER
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3781

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07/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 13 June 2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 58-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosl et al. US 5,848,717 in view of Ohmi et al. US 5,762,217.

Bosl '717, in the embodiment of fig. 1, teaches a plastic closure for bottles, comprising a plastic cap (1) snap-fit over a bottle opening (4), a retaining bead (3) with a lead-in ramp surface and abutment surface inclined at an angle less than the inclination of the ramp surface, interlocking with a container neck bead (5). The disclosure teaches the cap is capable of sealing against positive internal pressure, for example, that caused by "carbonated beverages" (col. 2, line 56). The cap only seals against the bottle opening top and exterior surfaces.

Bosl '717 does not teach a plurality of segmented lugs braced by a band.

Ohmi '217 discloses a Resin Cap, comprising a cap (1) with a segmented skirt comprising a plurality of lugs (4a), and ring (2) configured for retaining the cap in the applied position. The ring is

Art Unit: 3781

connected to the skirt by a plurality of frangible bridges (11), which also comprise "vertical ridges" (see fig. 22). Furthermore, the band provides tamper-evidencing (col. 1, lines 61-62) and allows the cap to be easily removed, without the use of a tool (col. 3, lines 10-20). Ohmi '217 further discloses in col. 7, lines 17-20, "one bridge portion may be provided in a skirt piece 4a, or two bridge portions may be provided on both ends of skirt piece 4a." In an embodiment providing two bridge portions (11) to each segmented lug/skirt piece (4a), the reference anticipates the limitation, "a plurality of vertical ridges." Being formed of plastic, the frangible connections are inherently capable of collapsing to some degree.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Bosl '717, providing a segmented skirt and band, braced by two vertical ridges/bridge portions, as taught by Ohmi '217, motivated by the benefit of locking the cap to a container, providing tamper evidencing, and allowing the cap to be easily removed without the use of a tool. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 62, Bosl '717 does not teach the diameter of the container, although the closure could be molded to fit any sized container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the closure cap of Bosl '717 to have a lateral dimension of 4 cm, or any other suitable size, motivated by the benefit of sealing a like-sized container. Furthermore, it has been held that a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 63, Bosl '717 does not teach the range of internal pressures the closure is capable of withstanding. The invention is drawn to withstanding internal pressures, especially those created by the containment of carbonated beverages.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap to withstand at least 60 psi, or any other internal pressure, motivated by the benefit of preventing blow-off of the cap from the container due to internal pressure caused by a carbonated beverage.

4. Claims 58-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Towns 'et al. US 5,368,178 in view of Ohmi et al. US 5,762,217.

Towns '178 teaches a plastic closure for bottles, comprising a plastic cap (10) snap-fit over a bottle opening (43), a retaining bead (35) with a lead-in ramp surface (37) and abutment surface (34) inclined at an angle less than the inclination of the ramp surface, interlocking with a container neck bead (49). The disclosure teaches the cap is capable of sealing against positive internal pressure, for example, that caused by "carbonated beverages" (col. 1, lines 6-10). The cap only seals against the bottle opening top and exterior surfaces.

Towns '178 does not teach a plurality of segmented lugs braced by a band.

Ohmi '217 discloses a Resin Cap, comprising a cap (1) with a segmented skirt comprising a plurality of lugs (4a), and ring (2) configured for retaining the cap in the applied position. The ring is connected to the skirt by a plurality of frangible bridges (11), which also comprise "vertical ridges" (see fig. 22). Furthermore, the band provides tamper-evidencing (col. 1, lines 61-62) and allows the cap to be easily removed, without the use of a tool (col. 3, lines 10-20). Ohmi '217 further discloses in col. 7, lines 17-20, "one bridge portion may be provided in a skirt piece 4a, or two bridge portions may be provided on both ends of skirt piece 4a." In an embodiment providing two bridge portions (11) to each segmented lug/skirt piece (4a), the reference anticipates the limitation, "a plurality of vertical ridges." Being formed of plastic, the frangible connections are inherently capable of collapsing to some degree.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Towns '178, providing a segmented skirt and band, braced by two vertical ridges/bridge portions, as taught by Ohmi '217, motivated by the benefit of locking the cap to a container, providing tamper evidencing, and allowing the cap to be easily removed without the use of a tool. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 62, Towns '178 does not teach the diameter of the container, although the closure could be molded to fit any sized container.

Art Unit: 3781

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the closure cap of Towns '178 to have a lateral dimension of 4 cm, or any other suitable size, motivated by the benefit of sealing a like-sized container. Furthermore, it has been held that a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 63, Towns '178 does not teach the range of internal pressures the closure is capable of withstanding. The invention is drawn to withstanding internal pressures, especially those created by the containment of carbonated beverages.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Towns '178 to withstand at least 60 psi, or any other internal pressure, motivated by the benefit of preventing blow-off of the cap from the container due to internal pressure caused by a carbonated beverage.

### ***Response to Arguments***

5. Applicant's arguments filed 13 June 2007 have been fully considered but they are not persuasive.

**Applicant argues Ohmi et al. fails to teach a plurality of vertical ridges positioned on each closure lug.**

In reply to the argument, Examiner again refers to col. 7, lines 12-20, teaching:

*"The number of the bridge portions 11 provided between the skirt portion 4 of the cap proper and the ring member 2 is such that the skirt piece 4a between adjoining cuts 9, 9 and the ring member 2 is connected via at least one bridge portion 11. The position of providing the bridge portion 11 may be variously provided. For example, as shown in FIG. 2, one bridge portion may be provided in a skirt piece 4a, or two bridge portions may be provided on both ends of the skirt piece 4a. **The position and the number are not particularly limited so long as at the time of closing the cap, the breakage of the bridge portions is prevented and at the time of opening the cap, the bridge portions can be easily broken.**"*

Because the reference teaches the number of frangible bridges - - which inherently have some measurable vertical component and thus comprise vertical ridges - - is taught to be irrelevant in view of the more important goal of ensuring sealing and ease of fracture, along with the fact the reference

Art Unit: 3781

explicitly teaches an embodiment with two frangible bridges per skirt portion/lug, and in view of *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8, that Ohmi et al. properly teaches the claimed invention.

### **Conclusion**

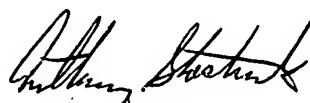
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N. Smalley whose telephone number is (571) 272-4547. The examiner can normally be reached on Monday - Friday 10 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jns

 06/26/2007

  
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